WEST

Generate Collection | Print

Search Results - Record(s) 1 through 17 of 17 returned.

☐ 1. Document ID: US 6197494 B1

L2: Entry 1 of 17 File: USPT Mar 6, 2001

US-PAT-NO: 6197494
DOCUMENT-IDENTIFIER: US 6197494 B1

TITLE: Apparatus for performing assays on liquid samples accurately, rapidly and simply

DATE-ISSUED: March 6, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Oberhardt; Bruce	Raleigh	NC		

US-CL-CURRENT: 435/4; 422/101, 422/102, 422/56, 422/58, 422/61, 422/73, 435/7.92, 435/7.95, 435/805, 435/810, 435/969, 435/970, 435/975, 436/518, 436/531, 436/807, 436/810

ABSTRACT:

An element and method for easily performing liquid assays are disclosed. The element uses capillary action to draw a predetermined volume of a liquid sample into a reaction chamber charged with reagent, where reaction between the liquid sample and the reagent is monitored.

16 Claims, 75 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 19

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. Desc | Image

☐ 2. Document ID: US 5677133 A

L2: Entry 2 of 17 File: USPT Oct 14, 1997

US-PAT-NO: 5677133
DOCUMENT-IDENTIFIER: US 5677133 A

TITLE: Dry chemistry cascade immunoassay and affinity assay

DATE-ISSUED: October 14, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Oberhardt; Bruce J.	Raleigh	NC		

US-CL-CURRENT: 435/7.1; 422/57, 422/58, 422/61, 422/73, 435/13, 435/288.5, 435/288.7, 435/5, 435/6, 435/7.2, 435/7.4, 435/7.7, 435/7.92, 435/7.93, 435/7.94, 435/810, 436/46, 436/526, 436/527, 436/805, 436/806, 436/807, 436/808, 436/809, 436/810

ABSTRACT:

A method is described for performing an affinity assay comprising contacting a sample to be assayed for the presence of an analyte with a dry reagent containing the analyte (hapten, antigen, antibody, receptor, or complementary polynucleotide) bound to a reaction cascade initiator, an antibody or other binding pair partner reactive with said analyte, and magnetic particles, to form an assay mixture in a reaction chamber, incubating the assay mixture, applying an oscillating or moving static magnetic field to the assay mixture, activating the reaction cascade initiator to initiate a reaction cascade, monitoring the response of the magnetic particles to the oscillating or moving static magnetic field to provide a time varying signal, and determining the analyte concentration of the sample by analysis of the time varying signal, as well as a kit for performing the assay and a diagnostic system for performing the assay.

4 Claims, 20 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 10

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWMC | Draw. Desc | Image

---

☐ 3. Document ID: US 5670329 A

L2: Entry 3 of 17 File: USPT Sep 23, 1997

US-PAT-NO: 5670329
DOCUMENT-IDENTIFIER: US 5670329 A

TITLE: Method and analytical system for performing fibrinogen assays accurately, rapidly and simply using a rotating magnetic field

DATE-ISSUED: September 23, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Oberhardt; Bruce J.	Raleigh	NC		

US-CL-CURRENT: 435/13; 422/58, 422/61, 422/73

ABSTRACT:

A method of performing a quantitative fibrinogen assay is provided which uses a dry reagent chemistry in combination with a rotational magnetic field and which has excellent correlation with the Fibrometer, the gold standard in the industry. Additionally, an apparatus for conducting the assay, a qualitative fibrinogen assay and a method for preparing a calibration curve for use with the quantitative fibrinogen assay are provided.

26 Claims, 5 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 5

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWMC | Draw. Desc | Image

☐ 4. Document ID: US 5658723 A

L2: Entry 4 of 17 File: USPT Aug 19, 1997

US-PAT-NO: 5658723
DOCUMENT-IDENTIFIER: US 5658723 A

TITLE: Immunoassay system using forced convection currents

DATE-ISSUED: August 19, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Oberhardt; Bruce	Raleigh	NC		

US-CL-CURRENT: 435/4; 422/101, 422/102, 422/56, 422/58, 422/61, 422/73, 435/7.92, 435/7.93, 435/7.94, 435/7.95, 435/969 , 435/970, 435/975, 436/518, 436/531, 436/807, 436/810

ABSTRACT:

An analytical system for performing an immunoassay is provided wherein the system contains an element that uses capillary action to draw a sample into a reaction chamber charged with reagent containing an immobilized antibody or immobilized antigen, where reaction between the liquid sample and the reagent is monitored, and optionally contains a method for controlling the moment that transport of the sample from the sample well to the reaction chamber is initiated.

5 Claims, 75 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 19

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC
Draw Desc | Image

☐ 5. Document ID: US 5601991 A

L2: Entry 5 of 17 File: USPT Feb 11, 1997

US-PAT-NO: 5601991
DOCUMENT-IDENTIFIER: US 5601991 A

TITLE: Dry chemistry cascade immunoassay and affinity assay

DATE-ISSUED: February 11, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Oberhardt; Bruce J.	Raleigh	NC		

US-CL-CURRENT: 435/7.91; 422/57, 422/58, 422/61, 422/73, 435/13, 435/5, 435/6, 435/7.2, 435/7.4, 435/7.7, 435/7.92, 435/7.93, 435/7.94, 435/808, 435/810, 435/970, 436/46, 436/526, 436/527, 436/805, 436/806, 436/807, 436/808, 436/809

ABSTRACT:

A method is described for performing an affinity assay comprising contacting a sample to be assayed for the presence of an analyte with a dry reagent containing the analyte (hapten, antigen, antibody, receptor, or complementary polynucleotide) bound to a reaction cascade initiator, an antibody or other binding pair partner reactive with said analyte, and magnetic particles, to form an assay mixture in a reaction chamber, incubating the assay mixture, applying an oscillating or moving static magnetic field to the assay mixture, activating the reaction cascade initiator to initiate a reaction cascade, monitoring the response of the magnetic particles to the oscillating or moving static magnetic field to provide a time varying signal, and determining the analyte concentration of the sample by analysis of the time varying signal, as well as a kit for performing the assay and a diagnostic system for performing the assay.

86 Claims, 20 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 10

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

---

☐ 6. Document ID: US 5350676 A

L2: Entry 6 of 17 File: USPT Sep 27, 1994

US-PAT-NO: 5350676
DOCUMENT-IDENTIFIER: US 5350676 A

TITLE: Method for performing fibrinogen assays using dry chemical reagents containing magnetic particles

DATE-ISSUED: September 27, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Oberhardt; Bruce J.	Raleigh	NC		
Gresalfi; Nancy	Durham	NC		

US-CL-CURRENT: 435/13; 356/39, 422/73, 435/4, 436/69, 73/64.43

ABSTRACT:

An apparatus and a method for performing a fibrinogen assay are disclosed. The reaction slide bears a sample well for receiving a liquid sample and a reaction chamber in fluid communication with the sample well. The reaction chamber contains a dry reagent matrix in which is embedded a plurality of magnetic particles. A whole blood or blood-derived sample added to the sample well is introduced simultaneously into the reaction chamber where it solubilizes the reagent, freeing the magnetic particles and allowing them to move in an oscillating pattern. This oscillating pattern is optically monitored to measure the concentration of clottable fibrinogen in the sample.

19 Claims, 7 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 5

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

---

☐ 7. Document ID: US 5110727 A

L2: Entry 7 of 17 File: USPT May 5, 1992

US-PAT-NO: 5110727
DOCUMENT-IDENTIFIER: US 5110727 A

TITLE: Method for performing coagulation assays accurately, rapidly and simply, using dry chemical reagents and paramagnetic particles

DATE-ISSUED: May 5, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Oberhardt; Bruce J.	Raleigh	NC		

US-CL-CURRENT: 435/13; 422/102, 422/110, 422/13, 422/292, 422/57, 422/58, 422/60, 422/947, 435/288.7, 435/810, 436/46, 436/69, 436/809, 73/863.72, 73/864.72

ABSTRACT:

A method and apparatus for the measurement of clot formation times, clot dissolution times, or clotting parameters is disclosed. This method performs these measurements by monitoring movement of magnetic particles incorporated in the sample being assayed, where the movement is induced by a magnetic field.

58 Claims, 62 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 31

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

---

☐ 8. Document ID: US 4970052 A

L2: Entry 8 of 17 File: USPT Nov 13, 1990

US-PAT-NO: 4970052
DOCUMENT-IDENTIFIER: US 4970052 A

TITLE: Device for the separation of the lighter fraction from the heavier fraction of a liquid sample

DATE-ISSUED: November 13, 1990

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Oberhardt; Bruce J.	Raleigh	NC		
Palmer; Phyllis J.	Durham	NC		

US-CL-CURRENT: 422/101; 210/247, 210/321.6, 210/321.84, 210/416.1, 422/104, 600/573, 600/575, 600/576, 600/577, 604/414

ABSTRACT:

A device for the separation of the lighter fraction from the heavier fraction of a liquid sample for use with two evacuated receptacles includes a housing having an interior cavity and a membrane separator dividing this cavity into a first portion

and a second portion. The membrane separator has a porosity selected for the desired separation thereacross. An inlet structure is provided for fluid communication between the first portion of the interior cavity and the source of the liquid sample. First structure is provided to allow fluid communication between the first portion of the interior cavity and the first evacuated receptacle. This first structure is opposed from the inlet structure so that liquid passing from the inlet to the first structure travels in a direction along the surface of the membrane. Further structure is provided to allow fluid communication between the second portion of the interior cavity and the second evacuated receptacle.

8 Claims, 26 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 11

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC
Draw Desc | Image

☐ 9. Document ID: US 4879098 A

L2: Entry 9 of 17 File: USPT Nov 7, 1989

US-PAT-NO: 4879098
DOCUMENT-IDENTIFIER: US 4879098 A

TITLE: Device for the separation of the lighter fraction from the heavier fraction of a liquid sample

DATE-ISSUED: November 7, 1989

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Oberhardt; Bruce J.	Raleigh	NC		
Palmer; Phyllis J.	Durham	NC		

US-CL-CURRENT: 422/101; 210/247, 210/321.6, 210/321.84, 210/416.1, 422/104, 600/573, 600/575, 600/576, 600/577, 604/414

ABSTRACT:

A device for the separation of the lighter fraction from the heavier fraction of a liquid sample for use with two evacuated receptacles includes a housing having an interior cavity and a membrane separator dividing this cavity into a first portion and a second portion. The membrane separator has a porosity selected for the desired separation thereacross. An inlet structure is provided for fluid communication between the first portion of the interior cavity and the source of the liquid sample. First structure is provided to allow fluid communication between the first portion of the interior cavity and the first evacuated receptacle. This first structure is opposed from the inlet structure so that liquid passing from the inlet to the first structure travels in a direction along the surface of the membrane. Further structure is provided to allow fluid communication between the second portion of the interior cavity and the second evacuated receptacle.

18 Claims, 26 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 11

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC
Draw Desc | Image

☐ 10. Document ID: US 4849340 A

L2: Entry 10 of 17 File: USPT Jul 18, 1989

US-PAT-NO: 4849340
DOCUMENT-IDENTIFIER: US 4849340 A

TITLE: Reaction system element and method for performing prothrombin time assay

DATE-ISSUED: July 18, 1989

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Oberhardt; Bruce	Raleigh	NC		

US-CL-CURRENT: 435/13; 422/110, 422/57, 422/58, 422/73, 422/947, 435/7.1, 436/517, 436/525, 436/526, 436/69, 73/863.71, 73/864.72

ABSTRACT:

An element and method for easily performing liquid assays are disclosed. The element uses capillary action to draw a predetermined volume of a liquid sample into a reaction chamber charged with reagent, where reaction between the liquid sample and the reagent is monitored.

16 Claims, 75 Drawing figures
Exemplary Claim Number: 10
Number of Drawing Sheets: 19

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

☐ 11. Document ID: US 4843017 A

L2: Entry 11 of 17 File: USPT Jun 27, 1989

US-PAT-NO: 4843017
DOCUMENT-IDENTIFIER: US 4843017 A

TITLE: Device for the separation of the lighter fraction from the heavier fraction of a liquid sample

DATE-ISSUED: June 27, 1989

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Oberhardt; Bruce J.	Raleigh	NC		
Palmer; Phyllis J.	Durham	NC		

US-CL-CURRENT: 436/177; 210/321.6, 210/321.84, 210/433.1, 210/649, 422/101, 422/104, 436/178, 600/575, 600/576, 600/577 , 604/414

ABSTRACT:

A device for the separation of a lighter fraction from the heavier fraction of a liquid sample for use with two evacuated receptacles includes a housing having an interior cavity and a membrane separator dividing this cavity into a first portion and a second portion. The membrane separator has a porosity selected for the desired

separation thereacross. An inlet structure is provided for fluid communication between the first portion of the interior cavity and the source of the liquid sample. First structure is provided to allow fluid communication between the first portion of the interior cavity and the first evacuated receptacle. This first structure is opposed from the inlet structure so that liquid passing from the inlet to the first structure travels in a direction along the surface of the membrane. Further structure is provided to allow fluid communication between the second portion of the interior cavity and the second evacuated receptacle.

5 Claims, 26 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 11

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWMC
Draw. Desc | Image

☐ 12. Document ID: US 4601697 A

L2: Entry 12 of 17 File: USPT Jul 22, 1986

US-PAT-NO: 4601697
DOCUMENT-IDENTIFIER: US 4601697 A

TITLE: Long indwelling double bore catheter

DATE-ISSUED: July 22, 1986

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mammolenti; Joseph	Granger	IN		
Oberhardt; Bruce J.	Mishawaka	IN		

US-CL-CURRENT: 604/43; 604/269

ABSTRACT:

A long indwelling double bore catheter for dilution and sampling of blood on a continuing basis capable of being used for long periods of time. The long indwelling double bore catheter has a small mixing chamber with an opening of a cross-sectional area equal to or less than the combined cross-sectional areas of the double bores, said opening communicating with the body fluid, e.g., blood, to be sampled, and wherein the distance of the mixing chamber from the distal end of the double bores to the end of the catheter is equal to or greater than 2 millimeters. Preferably, the volume of the mixing chamber is between about 3 and about 9.times.10.sup.-5 cubic inches. Preferably, the opening which communicates with the body fluid is a noncircular elongated opening which is equal to or less than twice the combined cross-sectional areas of the double bores.

1 Claims, 6 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWMC
Draw. Desc | Image

☐ 13. Document ID: US 5110727 A

L2: Entry 13 of 17 File: EPAB May 5, 1992

PUB-NO: US005110727A
DOCUMENT-IDENTIFIER: US 5110727 A
TITLE: Method for performing coagulation assays accurately, rapidly and simply, using dry chemical reagents and paramagnetic particles

PUBN-DATE: May 5, 1992

INVENTOR-INFORMATION:

NAME	COUNTRY
OBERHARDT, BRUCE J	US

INT-CL (IPC): B01L 3/00; C12M 1/14; G01N 1/12
EUR-CL (EPC): B01L003/00; G01N033/49, G01N033/52 , G01N035/00

ABSTRACT:

A method and apparatus for the measurement of clot formation times, clot dissolution times, or clotting parameters is disclosed. This method performs these measurements by monitoring movement of magnetic particles incorporated in the sample being assayed, where the movement is induced by a magnetic field.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

---

☐ 14. Document ID: WO 8910788 A1

L2: Entry 14 of 17 File: EPAB Nov 16, 1989

PUB-NO: WO008910788A1
DOCUMENT-IDENTIFIER: WO 8910788 A1
TITLE: COAGULATION ASSAY SYSTEMS WHICH UTILIZE PARAMAGNETIC PARTICLES

PUBN-DATE: November 16, 1989

INVENTOR-INFORMATION:

NAME	COUNTRY
OBERHARDT, BRUCE	US

US-CL-CURRENT: 435/13
INT-CL (IPC): B01L 3/00; C12Q 1/56; G01N 33/86
EUR-CL (EPC): B01L003/00; G01N033/49, G01N035/00

ABSTRACT:

A method and apparatus for the measurement of clot formation times, clot dissolution times, or clotting parameters is disclosed. This method performs these measurements by monitoring movement of magnetic particles incorporated in the sample being assayed, where the movement is induced by a magnetic field.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw. Desc | Image

☐ 15. Document ID: ES 2128321 T3, WO 9201065 A, AU 9183119 A, EP 538393 A1, JP 06500463 W, TW 221493 A, US 5350676 A, EP 538393 A4, AU 660624 B, JP 2649608 B2, EP 867723 A2, EP 538393 B1, DE 69130644 E

L2: Entry 15 of 17 File: DWPI May 16, 1999

DERWENT-ACC-NO: 1992-056880
DERWENT-WEEK: 199926

TITLE: Assays for fibrinogen in blood samples - by optical monitoring fibrinogen reagent and magnetic particles in oscillating magnetic field

INVENTOR: GRESALFI, N; OBERHARDT, B J

PRIORITY-DATA: 1990US-0550570 (July 10, 1990), 1993US-0062334 (May 17, 1993)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
ES 2128321 T3	May 16, 1999		000	C12Q001/56
WO 9201065 A	January 23, 1992		000	
AU 9183119 A	February 4, 1992		000	C12Q001/56
EP 538393 A1	April 28, 1993	E	047	C12Q001/56
JP 06500463 W	January 20, 1994		009	C12Q001/56
TW 221493 A	March 1, 1994		000	G01N033/50
US 5350676 A	September 27, 1994		016	C12Q001/00
EP 538393 A4	January 26, 1994		000	
AU 660624 B	July 6, 1995		000	G01N033/86
JP 2649608 B2	September 3, 1997		047	C12Q001/56
EP 867723 A2	September 30, 1998	E	000	G01N033/86
EP 538393 B1	December 16, 1998	E	000	C12Q001/56
DE 69130644 E	January 28, 1999		000	C12Q001/56

INT-CL (IPC): C12M 1/14; C12Q 1/00; C12Q 1/37; C12Q 1/56; G01N 33/00; G01N 33/50; G01N 33/86

ABSTRACTED-PUB-NO: US 5350676A
BASIC-ABSTRACT:

Performing a fibrinogen assay comprises (a) subjecting to an oscillating magnetic field a reaction slide bearing (1) a sample well for receiving a liquid sample and (2) a reaction chamber contg. a dry reagent matrix in which is embedded homogeneously distributed magnetic particles, where the reagent is a protease which acts or promotes action directly on fibrinogen and induces fibrinogen polymn., the sample well and reaction chamber being in fluid connection through a transport zone of geometry such that a vol. of liquid analyte sample placed in the sample well and corresponding to the vol. of the reaction chamber is transported to the reaction chamber, (b) adding a whole blood or blood-derived sample to the sample well whereby the sample is introduced into the reaction chamber. The reagent is solubilised and the particles are freed to move in an oscillating pattern induced by the oscillating magnetic field, (c) optically monitoring the reaction chamber to measure e.g. a start time and a stop time for the fibrinogen assay corresponding to a change in the degree of particle movement relative to the oscillating magnetic field and (d) using these measurements to determine the concn. of clot table fibrinogen in the sample.

USE/ADVANTAGE - The methods provide for the rapid and sensitive assay of plasminogen in an undiluted whole blood or plasma sample. Detection of the concn. of fibrinogen can be used to investigate coagulation disturbances in patients and in thrombolytic therapy.

ABSTRACTED-PUB-NO:

WO 9201065A EQUIVALENT-ABSTRACTS:

Determn. of fibrinogen in a blood sample comprises placing a dry reagent mixt. contg. a protease which acts on fibrinogen to induce fibrin polymerisation, mixed uniformly with magnetic particles, in a reaction chamber of a slide, and addn. of a blood sample through a sample well which allows the sample to run into the reaction chamber, such that the sample vol. fills the reaction chamber, the reagent dissolves and the magnetic particles are free to oscillate on application of an oscillating magnetic field. The amplitude of the oscillations of the magnetic particles are monitored by light scattering, plotting the scattered intensity against time, and comparing the plot obtd. with that obtd. using a citrated blood sample in which coagulation cannot occur. After mixing reagent and sample, the magnetic particles in the blood sample shows a marked rise in oscillation amplitude (measured by optical scattering) to reach a max. which then decreases to a plateau; the difference between the oscillation amplitude in the blood sample and that in the citrated sample at any time is proportional to the concn. of fibrinogen in the sample; and the difference in the slopes of the plots at any time gives the rate of coagulation at that time.

USE/ADVANTAGE - The process facilitates the rapid and accurate diagnosis of thrombotic or haemophiliac conditions and the effects of therapeutics. The determination of fibrinogen levels allows a more accurate assessment of antithrombotic therapy or the prevention of bleeding hazards.

☐ 16. Document ID: WO 8910788 A, AU 8821397 A, EP 418235 A, JP 03504076 W, US 5110727 A, AU 633805 B, CA 1326883 C, IL 92191 A, EP 418235 B1, EP 418235 A4, DE 3853541 G, JP 2634219 B2, KR 135782 B1

L2: Entry 16 of 17 File: DWPI Nov 16, 1989

DERWENT-ACC-NO: 1989-356384
DERWENT-WEEK: 200004

TITLE: Coagulation assay system for measuring clot formation or dissolution - using dry reagent contg. paramagnetic particles with movement under magnetic field monitored to give end-pt.

INVENTOR: OBERHARDT, B; OBERHARDT, B J

PRIORITY-DATA: 1988US-0192672 (May 10, 1988), 1987US-0033817 (April 3, 1987), 1989IL-0092191 (November 2, 1989), 1989KR-0016267 (November 9, 1989)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 8910788 A	November 16, 1989	E	150	
AU 8821397 A	November 29, 1989		000	
EP 418235 A	March 27, 1991		000	
JP 03504076 W	September 12, 1991		000	
US 5110727 A	May 5, 1992		060	
AU 633805 B	February 11, 1993		000	C12Q001/56
CA 1326883 C	February 8, 1994		000	C12Q001/56
IL 92191 A	November 28, 1994		000	G01N033/86
EP 418235 B1	April 5, 1995	E	078	B01L003/00
EP 418235 A4	March 11, 1992		000	
DE 3853541 G	May 11, 1995		000	B01L003/00
JP 2634219 B2	July 23, 1997		042	C12Q001/56
KR 135782 B1	April 22, 1998		001	A61B005/00

INT-CL (IPC): A61 B 5/00; B01 L 3/00; B01 L 3/02; B01 L 11/00; C12 M 1/14; C12 M 1/34; C12 Q 1/56; G01 N 1/12; G01 N 27/74; G01 N 33/86

ABSTRACTED-PUB-NO: EP 418235B
BASIC-ABSTRACT:

In a coagulation assay, the improvement comprises using a dry reagent contg. magnetic particles. Kit for performing a coagulation assay comprises a permanent magnet, a timer, and a reaction slide charged with at least one dry reagent contg. paramagnetic particles.

System for performing blood coagulation measurements comprises an instrument with a temp. control, a device for producing an oscillating magnetic field or a moving permanent magnetic field capable of causing magnetic particle movement, an illuminating device,and contg. at least one dry reagent charged with paramagnetic particles and capable of accepting a sample of whole blood or plasma; a system for photometrically monitoring magnetic particle movement and interpreting the results of magnetic particle movement to perform assay determinations; and an element contg. the reagent.

USE/ADVANTAGE - Useful in assay of biochemical components involves in clot lysis or in activation or inhibition of clot lysis; in clotting or clot formation assays; and clotting parameter assays. The assays are used e.g. in screening, diagnosis, and for monitoring patients receiving anticoagulant therapy. Reagent instability problems are reduced d reagent soln. prepn. is not required. The assay is highly accurate and reproducible, with minimum sample manipulation and no need to separate red blood cells from plasma. Only very small amts. of sample are required.
ABSTRACTED-PUB-NO:

US 5110727A EQUIVALENT-ABSTRACTS:

A method for performing a coagulation assay on a whole blood or plasma sample, comprising: (i) adding to a first component of the assay, a second component of the assay, wherein said first component comprises a dry coagulation assay reagent, which is not a prothrombin time assay reagent, arranged in a substantially flattened configuration and containing magnetic particles in intimate admixture therewith, wherein said second component is whole blood or plasma and wherein said first component is subjected to (ia) and oscillating magnetic field, (ib) a moving permanent magnetic field or (ic) a combination of a oscillating magnetic field and a stationary permanent magnetic field; and (ii) monitoring movement induced in said magnetic particles by (ia) or (ib) or (ic) to obtain said coagulation assay measurement.

Determin. of blood clotting times comprises addn. of a blood or plasma sample to a dry coagulation agent contg. a homogeneous dispersion of magnetic particles in a cell placed in an oscillating and/or permanent magnetic field; and monitoring the movement

of the magnetic particles with time.

The method is also applicable to the determn. of clot dissolution times in the presence of a thrombolytic agent and the measurement of clotting parameters.

USE/ADVANTAGE - The process facilitates rapid clinical analysis and diagnosis.

WO 8910788A

☐ 17. Document ID: US 6197494 B1, WO 8807666 A, AU 8815918 A, EP 308494 A, US 4849340 A, JP 01502797 W, CA 1310566 C, EP 308494 B1, DE 3853457 G, US 5658723 A, JP 2736091 B2

L2: Entry 17 of 17 File: DWPI Mar 6, 2001

DERWENT-ACC-NO: 1988-292929
DERWENT-WEEK: 200115

TITLE: Element for performing liq. assay - has sample well and reaction volume connected by capillary transfer, for accurate measurement with min. sample manipulation

INVENTOR: OBERHARDT, B

PRIORITY-DATA: 1987US-0033817 (April 3, 1987), 1989US-0350851 (May 12, 1989), 1992US-0865634 (April 9, 1992), 1994US-0247411 (May 23, 1994), 1997US-0819341 (March 18, 1997)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 6197494 B1	March 6, 2001		000	G01N033/53
WO 8807666 A	October 6, 1988	E	116	
AU 8815918 A	November 2, 1988		000	
EP 308494 A	March 29, 1989	E	000	
US 4849340 A	July 18, 1989		041	
JP 01502797 W	September 28, 1989		000	
CA 1310566 C	November 24, 1992		000	G01N033/86
EP 308494 B1	March 29, 1995	E	036	G01N001/12
DE 3853457 G	May 4, 1995		000	G01N001/12
US 5658723 A	August 19, 1997		094	G01N033/53
JP 2736091 B2	April 2, 1998		034	C12M001/34

INT-CL (IPC): B01 L 3/00; C12 M 1/14; C12 M 1/34; C12 Q 1/02; G01 N 1/12; G01 N 33/483; G01 N 33/487; G01 N 33/53; G01 N 33/531; G01 N 33/543; G01 N 33/545; G01 N 33/553; G01 N 33/86

ABSTRACTED-PUB-NO: EP 308494B
BASIC-ABSTRACT:

Liq. sample to be assayed is placed in a sample well (64) in an element (1) having a channel structure with a geometry which causes the sample to be drawn into and fill a reaction volume (66) by capillary action and where, after the reaction volume is filled, the liquid sample remains stationary.

USE/ADVANTAGE - Performing no preparation of sample or reagent using only a small sample and permits accurate measurement with minimum sample manipulation.
ABSTRACTED-PUB-NO:

US 4849340A EQUIVALENT-ABSTRACTS:

A device for performing a prothrombin time assay comprising: (i) a reaction element (30) comprising (a) a sample well (64) for receiving a liquid sample and (b) a reaction chamber containing a dry matrix comprising a prothrombin time assay reagent, the matrix having embedded and homogeneously distributed therein a plurality of magnetic particles (197); (ii) the sample well and reaction chamber being connected through a transport zone whose geometry is such that a liquid sample placed in the sample well is transported spontaneously to the reaction chamber by capillary action; (iii) means (400) for optically monitoring said reaction chamber, (iv) means (195, 196, 199) for subjecting said reaction chamber to an oscillating magnetic field, whereby when the reagent is capable of being dissolved by the sample, thereby freeing the particles to move in an oscillating pattern induced by the magnetic field, the degree of particle movement providing a start and stop time for the assay.

Determination of blood coagulation times (prothrombin time test) comprises mixing a liquid blood sample (fixed vol.) and a solid reagent matrix in which magnetic particles, e.g. magnetite, are dispersed; the mixt. is monitored optically; and the dissolution of the solid matrix dissolves in the liquid sample is accompaniment by the release of the magnetic particles; the reaction chamber is subjected to an oscillatory magnetic field, and the change in magnetic flux with time leads to blood coagulation time. USE - The process is an aid for rapid clinical analysis and diagnosis.

(41pp)

US 5658723A

An analytical system for performing an immunoassay, comprising:

(i) a reaction element comprising (1) a base and (2) a cover assembled to generate (a) a sample well for receiving a liquid sample, and (b) a reaction chamber containing at least one immobilized antibody or antigen, where the cover has a sample receiving opening over the sample well and a vent opening over the reaction chamber, (3) a liquid absorbing means, connected to the base or the cover by a flexible support means such that the liquid absorbing means must be caused to enter the vent opening in order to remove liquid from the reaction chamber and (4) means for inducing forced convention currents within the reaction chamber; the sample well and the reaction chamber being in fluid connection through a transport zone of geometry such that a volume of liquid sample placed in the sample well and corresponding to the volume of the reaction chamber is transported from the sample well to the reaction chamber by capillary action, where the reaction element is of a geometry sufficient to provide immobility of the sample once the reaction chamber has been filled, in an absence of external forces; and

(ii) means for optically monitoring the reaction chamber.

US 6197494B

Liq. sample to be assayed is placed in a sample well (64) in an element (1) having a channel structure with a geometry which causes the sample to be drawn into and fill a reaction volume (66) by capillary action and where, after the reaction volume is filled, the liquid sample remains stationary.

USE/ADVANTAGE - Performing no preparation of sample or reagent using only a small sample and permits accurate measurement with minimum sample manipulation.

WO 8807666A

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

Generate Collection | Print

Term	Documents
COAGULAT$	0
COAGULAT.DWPI,TDBD,EPAB,JPAB,USPT,PGPB.	53
COAGULATABILITY.DWPI,TDBD,EPAB,JPAB,USPT,PGPB.	39
COAGULATABL.DWPI,TDBD,EPAB,JPAB,USPT,PGPB.	4
COAGULATABLE.DWPI,TDBD,EPAB,JPAB,USPT,PGPB.	192
COAGULATANT.DWPI,TDBD,EPAB,JPAB,USPT,PGPB.	3
COAGULATANTS.DWPI,TDBD,EPAB,JPAB,USPT,PGPB.	3
COAGULATATED.DWPI,TDBD,EPAB,JPAB,USPT,PGPB.	1
COAGULATBLE.DWPI,TDBD,EPAB,JPAB,USPT,PGPB.	1
COAGULATD.DWPI,TDBD,EPAB,JPAB,USPT,PGPB.	3
(L1 AND COAGULAT$).USPT,PGPB,JPAB,EPAB,DWPI,TDBD.	17

There are more results than shown above. Click here to view the entire set.

Display Format: - Change Format

Previous Page Next Page